

CLAIMS

1. Front structure for a vehicle comprising:

a unitary panel formed to at least partially define a vehicle cowl and a vehicle bulkhead, and wherein the unitary panel is further configured to at least partially define a front compartment of the vehicle.

2. The front structure of claim 1, wherein said unitary panel is formed using a method selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming.

3. The front structure of claim 1, wherein said unitary panel further defines a hood configured to extend over and across the front compartment.

4. The front structure of claim 3, wherein said unitary panel is bendable to further define a hood inner panel portion and a hood outer panel portion, said hood inner panel portion being juxtaposed with said hood outer panel portion and located inboard thereof.

5. The front structure of claim 3, wherein said unitary panel is bendable to further define two opposing fender portions extending generally downward from said hood.

6. The front structure of claim 5, wherein each of said two opposing fender portions is bendable to define a fender outer panel portion and a fender inner panel portion, said fender inner panel portion being juxtaposed with said fender outer panel portion and being located inboard thereof.

7. The front structure of claim 3, wherein said hood defines an access opening for the front compartment, and further comprising an access door operatively connectable to said hood for opening and closing the access opening.

8. The front structure of claim 1, wherein said cowl is configured to extend across the front compartment, and wherein said bulkhead is configured to at least partially separate the front compartment from a passenger compartment of the vehicle.

9. The front structure of claim 1, wherein said cowl comprises a structural cross beam, said cross beam being configured to extend across the front compartment.

10. The front structure of claim 9, wherein said cowl forms an air intake plenum, and wherein said cross beam is formed between said plenum and said vehicle bulkhead.

11. The front structure of claim 1, wherein said unitary panel further defines structure at least partially forming a vehicle dashboard and configured for attachment with respect to an instrument panel.

12. The front structure of claim 1, wherein the vehicle includes two front hinge pillars each having a forward edge, and wherein said unitary panel is configured such that the forward edge of each of said two front hinge pillars substantially continuously abuts said unitary panel when said unitary panel is operatively connected to the vehicle.

13. The front structure of claim 1, wherein said vehicle cowl forms an air intake plenum.

14. A body panel for a vehicle comprising:

a unitary panel formed to at least partially define a hood, wherein said hood is bendable to define a hood outer panel portion and a hood inner panel portion, said 5 hood inner panel portion being juxtaposed with said hood outer panel portion and being located inboard thereof, and wherein said unitary panel at least partially defines a front compartment of the vehicle.

15. The body panel of claim 14, wherein said unitary panel is formed using a method selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming.

16. The body panel of claim 14, wherein said unitary panel is bendable to further define two opposing fenders extending from said hood.

17. The body panel of claim 14, wherein each of the two opposing fenders is bendable to define a fender outer panel portion and a fender inner panel portion, said fender inner panel portion being juxtaposed with said fender outer panel portion and being located inboard thereof.

18. Front structure for a vehicle comprising:

a unitary panel formed to at least partially define a vehicle cowl, a vehicle bulkhead, a hood and two opposing fender portions extending from said hood, wherein 5 said unitary panel is formed using a method selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming, and wherein the unitary panel at least partially defines a front compartment of the vehicle.

19. A method of manufacturing front structure for a vehicle, the method comprising:

5 forming a unitary panel using a method selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming, wherein the unitary panel at least partially defines a vehicle cowl and a vehicle bulkhead.

20. The method of claim 19, wherein said unitary panel further defines a vehicle hood, and the method further comprising:

5 bending said unitary panel to define said cowl, said bulkhead, and said hood.